

FIGURE 1A**CHIR 12.12 light chain:****leader:****MALPAQLLGLLMLWVSGSSG****variable:****DIVMTQSPLESLTVPGEFASISCRSSQSLLYSNGYNYLDWYLQKPGQSPQVLISLGSNRASG
VPDRFSGSGSGTDFTLKISRVEAEDVGVVYCMQARQTPFTFGPGTKVDIR****constant:****RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK
DSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC****FIGURE 1B****CHIR-12.12 heavy chain:****leader:****MEFGLEWVFLVAILRGVQC****variable:****QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVAVISYEESNRYHAD
SVKGRFTISRDNISKITLYLQMNSLRTEDTAVVYCARDGGTAAPGPDYWGQGTLVTVSS****constant:****ASTKGPSVFPLAPASKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL
YSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSODKTHTCPPCPAPELLGGPSVF
LFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREMQYNSTYRVV
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRREEMTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPGK****alternative constant region:****ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL
YSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSODKTHTCPPCPAPELLGGPSVF
LFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREMQYNSTYRVV
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRREEMTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MHEALHNHYTQKSLSLSPGK**

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FIGURE 2A

DNA sequence of light chain of CHIR-12.12:

5'atggcgtccclgctcagcgcclggggctgolaatgctolgggtctctggalccagtggggataligtatgactcagctotocaolcto
 cctgaccgtonccclggagggccgtccatctcctgcaggctccagtcagagoolcotgtatagtaatggatncaactatttgattg
 gtaootgouaagccagggcagctccacagggcctgaltotittgggttataatggggctccggggcctggacaggglcagtggon
 gldgatacggccacagattttacactgaanaatcagcagagtggaagctgaggaagttgggggttattactgcatgcuaagolgaacaaol
 ccattcaolctcggccctgggacccaaagldgaaalacagagcgaacclggtgctgcacootctgclctntollcccgccatctgatyagcagl
 lgnaatclggaactggctclgltgtgtgctgctgaataactlclalocagagagggccaaaglacagtggaagglggataacggccctcc
 aatcggglaaacicccagggagagtgtonongagonggacugcaagggacaggaaccctacaggtcagcagcaccolgaogclgagcaaa
 agcagacilaogagaaacaaagylacgctgctggaagtcacccalcaggggctgagglcggccolgcacaaagagctlcuaacagg
 gagagtggtta3'

FIGURE 2B

DNA sequence of heavy chain of CHIR-12.12 (including introns):

5'alggaggtllgggctgagotgggtllcoctgtgtotatttaugaggtgtcaggtgacgttggagggtotggggaggggt
 ggtcoogcolgggagggccctgagacgtccclgtgacagcccltggaattcaccltcagtaotatggatgacotgggtccggcagggctc
 cagggcaaggggtggaglggggtggcagllatatcatatgagggaaaglaatagataccalgcagactccgtgaaaggccggatlcacca
 lciccagagacaaatlcnaagatocagctgtalolgaanaatgaaacagccctcaggaactgagggacucggctgtgtaltactgtggagagag
 gggggclnagcagccclgggcolgactactggggccaggggaacccclgggtaccgclctootaaggonaglacaaaggggccatccgt
 cltcccccgggcyccggclagcagagagacactclgggggcaacagggccctggggotggcclgggtcaaggactacttcccgaacccg
 tgacgggtgtcglggaaactcagggccggccctgacacagcgggogtggacacccctccggcclgclctacagclclcagagacclolactccolcag
 ougogtggclgacogtggccolooagcagctlgggcaccagacccatcatclgcaacgclgaaatocaaugcccaaggaacacaaaggtgg
 acaagaaagglggglgagagggccagccacagggaggggggggtgclolggclggaaagccagggctcagcgtccclggctggagccncccc
 gctalgcaglgccagltocaggggagcagagggcagggccogctgctgclctcaccggagggcccltggccggcccgctolnlgctcaggg
 gagaggggtotlgtgggtllccccagggclctgggcaagggcagggolaggtggccctaaacccagggccctggcagacagagggggcaggg
 gclggggclagacclggcagggagccatattccgggagggacccctggccclgacootaagggccaccccaagggccaaactctcactccclccc
 lcaagctcgggacactlctolcctcccgattocaglaacloocaaatctctctcagagagcccaaatctltgacaaaacclacacacagco
 conogtggccaggglaagccagggccogctggccctccagcclaaaggggacagggggccctagaglaagcolggulocaggggac
 agggccocagccgggclgclgacacgclccacclccalcctctcagacacotgaaolcctggggggagccgclaggtcttccctccccc
 aaaaacccnaggacacccctolgaolcctggacccolgaaggtcactgclgggtgtgggaggtgagccaaagaaagccclgaaggtou
 agtlcuatgglaoglggaogggogtggaggggtgcatuagggcaagacaaagccgggggagggagggogtgaucacagccaglaoggtgt
 ggtaagggtootacccgtccctgcacaaaggactggctgaalggcaagggagtaaaagglgaaaggclloaaacaaagccctccagggcc
 ccclcgagaaaaccatccacaaagccuuaaggtgggagccogtggggylggagggggccacalgggagagggccgggtcggggccaccc
 lolggccclggagglgacoggtgtaccuacctctylccctacagggggcagcccgaggaacacuggtgtacacccctggccoculocgg
 gagggaglalgcagaggaacaggggtcagccclgacctggcolgggtcaagaggcolclatccaaugogacatogccgtggaggtgggagagcau
 lggggcagccgggagaaacaaagacacagccolcctggctggactccgaggggtcctclccclctatagcaugctcaccgtgggao
 aagagcaggggtggcagggggggaggggtctctcagctccgtgagtgatgagggctclgacacacaaolacacagcagaaagagccolccc
 ctgclccgggttaaatga3'

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FIGURE 3A**CHIR-5.9 light chain:****leader:****MALLAQLLGILLMLWVPGSSG****variable:****AIVMTQPPPLSSPVTLGQPASISCRSSQSLVHSDGNTYLNWLQQRPGQPPRLLIYKFFRRLSG
VFDRFSSGAGTDFTLKISRVEAEDVGVVYCMQVTQFPHTFGQGRLEIK****constant:****RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK
DSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC****FIGURE 3B****CHIR-5.9 heavy chain:****leader:****MGSTAILALLLAVLQGVCA****variable:****EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKGLEWMGIIYPQDS DTRYSP
SFQGGVTFISADKSI STAYLQWSSLKASDTAMYYCARGTAAGR DYYYYYGM DVWGQGTTVTVS
S****constant:****ASTKGPSVFPLAPASKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPPELLGGPSVF
LFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREREQYNSTYRVV
SVLTVLHQDWLNGREYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRREEMTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFPQSV
MREALRNHYTQKSLSLSPGK****alternative constant region:****ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGL
YSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPPELLGGPSVF
LFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREREQYNSTYRVV
SVLTVLHQDWLNGREYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRREEMTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFPQSV
MREALRNHYTQKSLSLSPGK**

FIGURE 4A

Coding sequence for short isoform of human CD40:

```

1 atggttcgtc tgcctcgtca gtycgtccic tggguctgct tgctgaccgc tglccatcaa
61 gaaccaccca ctgcattcug agaaaaacag laoctaala acagtcaaly ctgtctllg
121 tgcacgccng gacagaaact ggtgagtga cgcacagagt tcuctgaac ggaatgcctt
181 ccttgoggtg aaagogaalt cctagacacc lggaaacagag agacacactg coqccagcac
241 aaataclgcg accccnacci agggcctcgg gtccagaaag agggcaccct agaaaacagac
301 accatctgca cctglgaaga agcclggcac tglacagatg aggcclgtga gagctgtglo
361 ctgcaccgcl catgologcc oggotttggg gtcnagcaga llgctacagg gglilctgat
421 accatclgcy agccctgccc agtcggcltc ttctccaatg tctaatolgo ttogaaaaa
481 tglcaccclt ggacuaggtc cccnaggalog gctgagagcc ctggtggiga tccccatcat
541 ctccgggato ctgttlgcca lcolctggg gctggcllt acaaaaaag tggccaagaa
601 gccaaccaat aa

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FIGURE 4B

Encoded short isoform of human CD40:

```

1 mvrplqevl wgciltavhp opptaercq ylnaqccsl cpggqlvsl ctcftctcl
61 pgesefldt wnrethchqh kydpnlglr vqqlgtactd tiotceegwh olseacusev
121 hrscspgfg vkqiatevsl tiepopvgf fanvesafek ohpwtrspgs acspggdphh
181 lrdpvchplg aglyqkaggc anq

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FIGURE 4C

Coding sequence for long isoform of human CD40:

```

1 atggttglo tgcctotgca glgcgtccic tggggctgct tgcagacgc tgcacacca
61 gaaccaccca ctgcatycag agaaaaacag laacaaataa acagtcaglg cigtctitg
121 tggcagccag gacagaaaci ggtgaglgac tgcacagagi tcactgaaac ggaalgcctt
181 ccttgogglg aaagcgaaii cctagacacc tggaaacagag agaacacalg ccaacagcag
241 aaatacrgcg accconacct uggtgcttgg gtcacagcaga aggggaacac agaaacagac
301 accnctgca cctlgaaaga aggcagggac tgaagaglg aggcctgtga gugctgtgic
361 ctgacogct calyctogcc cggcttggg gtcacagcaga ttgtacagg ggilicgat
421 accalcigeg agccctggcc aglcggcttc ttctcaalg tgcacatgc ttogaaaaa
481 tgcacccctt ggaacagolg tgagaaacaa gacctgggtg tgcacagggc aggcacaaa
541 aagucgtatg lltotglgg toccaggat cggctgagag ccttgggtgt gatcccpato
601 atctcggga lctgttngc catccctc gtgcaggtol llataaaaa ggtggccaag
661 aagccaaacc aiaaggcccc ccaccccaag caggaaaccc aggaatcaa tttcccgac
721 gultotcclg gctcaaacac tgclyctcca glgcaggaga cttacalg atgcaaacg
781 glacccaugg aggaagccaa agagagtcgo atotcaglgc aggaagagca gtga

```

FIGURE 4D

Encoded long isoform of human CD40:

```

1 mvrplqcvl wgciltavhp cpptacrekq ylinqccsl cpggqlvsvd cleltotecl
61 pacesafldt wnrothchqh kyedpnlgr vqqlgtactd tictocogwh ctseacescv
121 lhrscspgfg vkqiatgvsd ticepopvgf fanvsaalc chpwatcetk dlvvqqagln
181 kldvvcgpgd rlravvpi ifylfaii vlvfickvak kptnkaphpk qopqcinfpd
241 dlpgsnlaap vqerlhgcqp vtqcdgkesr isvqerq

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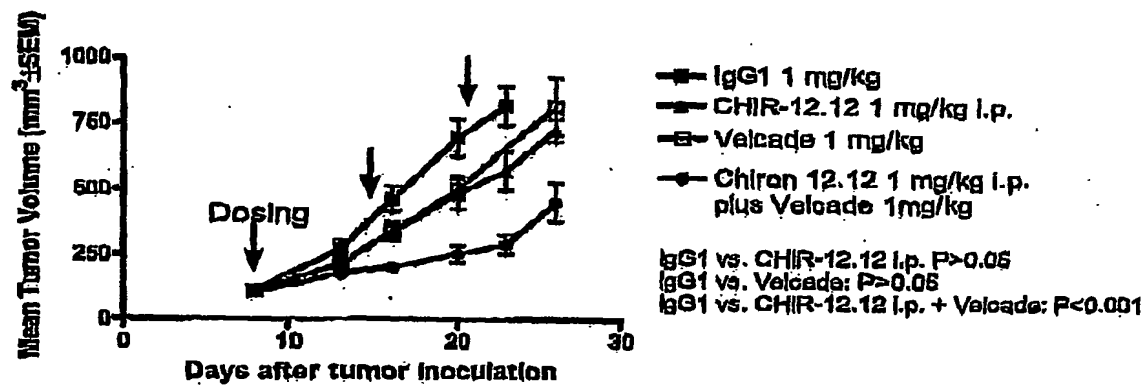


FIGURE 5

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FIGURE 6